Listing of Claims

1-17. (Previously Cancelled).

18. (Currently Amended) A method for treating conditions associated with the loss of cardiac muscle contractility ~~treatment of heart failure~~ comprising:

delivering ~~delivery of~~ an expression construct to myocytes therein, wherein the expression construct provides an expressible polynucleotide encoding ~~comprising coding sequence for~~ a dominant-negative phospholamban molecule ~~to heart,~~ wherein further expression of the polynucleotide ~~coding sequence is controlled by a promoter functional in the heart and the dominant negative phospholamban increases cardiac contractility or cardiac relaxation~~ accelerates SERCA2 mediated calcium ion transport in the treated myocytes to improve cardiac muscle contractility.

19. (Currently Amended) The method ~~as in~~ according to claim 18, wherein the ~~coding sequence~~ expression construct is ~~delivered using~~ a viral vector.

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Currently Amended) The method ~~as in~~ according to claim 18, wherein the dominant negative phospholamban comprises a phosopholamban molecule containing a single or double point mutation in Domain Ia thereof, the effect of which is to diminish the inhibitory activity of the molecule on SERCA2 ~~mutated to imitate phosphorylation of phospholamban~~.

24. (Currently Amended). The method according to ~~as in~~ claim 19 ~~18~~, wherein the ~~coding sequence is~~ viral vector is a DNA vector.

25. (Withdrawn). The method as in claim 18, wherein the coding sequence is RNA.

26. (Withdrawn) A method for treatment of heart failure comprising:

delivery of a DNA construct to heart comprising a coding sequence for an antisense phospholamaban RNA wherein transcription of the coding sequence is controlled by a promoter functional in heart and the antisense phospholamban RNA increases cardiac contractility or cardiac relaxation.

27. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered using a viral vector.

28. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by injection into the heart.

29. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by direct injection into the heart.

30. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by transcoronary injection into the heart.

31. (Withdrawn) The method as in claim 26, wherein the coding sequence is DNA.

32. (New) The method according to Claim 23, wherein the mutated phospholamban has a point mutation consisting of R14E, S16N, S16E or K3E/R14E.

33. (New) The method according to claim 18, wherein the dominant negative phospholamban comprises a phosopholamban molecule containing a single or double point mutation in Domain II thereof, the effect of which is to diminish the inhibitory activity of the molecule on SERCA2.

34. (New) The method according to claim 33, wherein the mutated phospholamban has a point mutation consisting of V49A.

CLAIMS WITHOUT MARKUPS

1-17. (Previously Cancelled).

18. (Currently Amended) A method for treating conditions associated with the loss of cardiac muscle contractility comprising:

delivering an expression construct to myocytes therein, wherein the expression construct provides an expressible polynucleotide encoding a dominant-negative phospholamban molecule, wherein further expression of the polynucleotide accelerates SERCA2 mediated calcium ion transport in the treated myocytes to improve cardiac muscle contractility.

19. (Currently Amended) The method according to claim 18, wherein the expression construct is a viral vector.

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Currently Amended) The method according to claim 18, wherein the dominant negative phospholamban comprises a phosopholamban molecule containing a single or double point mutation in Domain Ia thereof, the effect of which is to diminish the inhibitory activity of the molecule on SERCA2.

24. (Currently Amended). The method according to claim 19, wherein the viral vector is a DNA vector.

25. (Withdrawn). The method as in claim 18, wherein the coding sequence is RNA.

26. (Withdrawn) A method for treatment of heart failure comprising:

delivery of a DNA construct to heart comprising a coding sequence for an antisense phospholamaban RNA wherein transcription of the coding sequence is controlled by a promoter functional in heart and the antisense phospholamban RNA increases cardiac contractility or cardiac relaxation.

27. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered using a viral vector.

28. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by injection into the heart.

29. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by direct injection into the heart.

30. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by transcoronary injection into the heart.

31. (Withdrawn) The method as in claim 26, wherein the coding sequence is DNA.

32. (New) The method according to Claim 23, wherein the mutated phospholamban has a point mutation consisting of R14E, S16N, S16E or K3E/R14E.

33. (New) The method according to claim 18, wherein the dominant negative phospholamban comprises a phosopholamban molecule containing a single or double point mutation in Domain II thereof, the effect of which is to diminish the inhibitory activity of the molecule on SERCA2.

34. (New) The method according to claim 33, wherein the mutated phospholamban has a point mutation consisting of V49A.